Vancouver Response Center
T. 604.451.2727
Toll free T. 1.800.451.2727
F. 604.451.2713
Toll free T. 1.800.767.2736

Customer support email:
callcentre@creo.com

www.creo.com

Document number: 78-0148A-B
Release date: 10 February 2005

Technical bulletin

CID Font Primer and FAQ

Summary

Prinergy 2.3 fully supports Character ID (CID) fonts, Asian or otherwise. In the regions of the People's Republic of China, Japan and Korea, bundled fonts are no longer mandatory for Prinergy 2.3.1.3. The customer can install the after market fonts without the bundled CID fonts.

Factory fonts are always installed on the primary node, but they can be copied to a secondary server if you want to do normalizing on that server. The factory font bundles are described at the end of this document.

Third-party or after-market fonts can also be installed on a Prinergy system. They can be installed on either the primary or secondary server. Unlike factory fonts, they can be used only on the computer on which they are installed.

In general, Asian fonts, also known as Kanji fonts or CJK fonts (Chinese, Japanese, Korean) are highly protected. They cannot be copied from RIP to RIP or sent along un-embedded with a PS file for output only. To be able to use these fonts, you must either have them installed on your system or embedded in the file.

Background

Adobe used Original Composite Format (OCF) as a way of distributing and installing fonts that use large character sets, that is, greater than 256 characters. This is a proprietary Adobe format, although Adobe has also licensed other companies to use it. There are also known cases of companies who reverse-engineered the OCF format to distribute similar fonts.

Adobe is working hard to replace OCF with CID fonts. Adobe has a policy that allows users of OCF fonts to upgrade to CID fonts for little or no cost. This applies only to Adobe-distributed fonts (i.e. Morisawa). Other vendors may also do this, but this has not been verified. In addition, all new Adobe fonts will use the CID format instead of OCF. One reason is licensing—the OCF format wasn't keyed to a particular vendor's RIP, whereas CID is.

Font Protection Issues

Factory-installed Fonts

The only RIP property used to protect factory-installed fonts is license ID. Adobe assigns a unique license ID to each font bundle. For the fonts to be accessible, the ID of the font bundle must match the license ID specified by the RIP executable (Normalizer JTP). (Serial number and product name are relevant to after-market fonts, but not factory-installed fonts.)

After-market Fonts

Serial number, license ID, and product name properties of the RIP are used together to protect after-market fonts. The license ID and product name do not need to be unique on each hardware system. In the case of a Prinergy system, the license ID and product name will be the same for all component hardware systems.

The Appletalk Font Downloader used to download the font must derive a unique serial number from some characteristic of the target hardware system. The Appletalk Font Downloader encrypts the font files with a key derived from the serial number, license ID, and product name. For the font to be used or embedded into PDF on the target system, the RIP (Normalizer JTP) on that system must have the same serial number.

By default, and according to agreements with Morisawa, Adobe derives the serial number from the MAC (medium access control) address of the network card installed on the target system. This prevents the user from copying the installed font files from the original target system to a different system, then using or embedding a font. To prevent the user from walking up to all their systems and their friends' systems and downloading the font, typical after-market font installers have a protection scheme that permits only a limited number of installs (for example, three).

Distribution of CID fonts with Prinergy/Araxi

Customers in the regions of China, Japan and Korea can buy the font that matches their region from Creo. For example, a Japanese customer can buy only the Japanese font font bundles from Creo. Customers can choose from the following languages:

- Japanese, for distribution inside Japan
- Simplified Chinese, for distribution in China
- Traditional Chinese, for distribution in Taiwan or Hong Kong
- Korean, for distribution in Korea

Customers outside of Greater China, Japan, or Korea can buy any of the font bundles, but it must be only one bundle.

CJK fonts are sold as only high-resolution versions. Japanese CJK fonts are quite expensive, both for us and for end users purchasing those fonts as after-market packages. We offer bundles as a convenience to our

customers. Purchasing bundles will save the time and effort of purchasing the entire library and will probably also save money.

Some other issues to consider:

- We cannot sell single font faces to end-users. Fonts must be part of a defined package. We do not really want to get into the font business. It is definitely easier for us to make standard configurations, then point customers to Adobe or other font vendors for purchasing additional fonts, beyond what we provide.
- We pay royalties for installed fonts for in-house systems (for example, demo systems, and so on) at the same fee schedule as for end users.
- These configurations don't cover the standard roman versions or any other potential versions (Arabic, Cyrillic, and so on). We are not obligated by Adobe to provide such versions.
- If you install the after market font without the font bundle, then install the bundled font from Creo, the after market font may not work. For this situation, you need to get a new license for the after market font from the font vendor and re-install the font.

Questions and Answers

Q: Is it feasible to normalize to PDF, embedding the CID fonts, then output to RIPs that do not have those same CID fonts installed? What are the technical and legal implications of doing this?

A: As long as the font vendor has determined that their license allows end users to embed the fonts, it should work.

Q: Can I purchase more than one factory font bundle, for example, Advance Japanese and Simplified Chinese?

A: No. You can have only one factory font bundle; that bundle must be appropriate to your region. For example, if you are in Japan, you can buy either the Basic Japanese or Advanced Japanese bundle, but not both.

Q: Are bitmap fonts available for use on a Macintosh for page layout?

A: Bitmap fonts for each CJK set are available from Adobe and other vendors' websites, for example, Monotype.

Q: Which major font vendors ship CID-formatted fonts?

A: Japanese vendors include:

- Morisawa (for license to PS clone RIP vendors)
- Fontworks
- Dainippon Screen
- Ryobi
- NIS

Chinese vendors include:

- Hanyi
- DynaLab
- Arphic (Eastern Graphics), and so on

Korean vendors include:

- Softmagic
- Hanyang

Q: Is there an upgrade policy for users who purchased OCF-formatted fonts to upgrade to the new CID font format?

A: For Adobe fonts, yes. Please contact the font vendor for the latest upgrade pricing.

Font Bundles

Here are the existing font bundles:

- CONFIGURATION 1: Japanese, Standard (5 faces)
  All of these fonts use the Adobe-Japan1-5 Character Collection and Trademarks are owned by Morisawa & Company, Ltd.
  Ryumin Light KL
  Gothic Medium BBB
  Futo Min A101
  Futo Go B101
  Jun 101

- CONFIGURATION 2: Japanese, Deluxe (23 faces)
  All of these fonts use the Adobe-Japan1-5 Character Collection and Trademarks are owned by Morisawa & Company, Ltd.

  Ryumin Light KL
  Gothic Medium BBB
  Futo Min A101
  Futo Go B101
  Jun 101
  Midashi Min MA31
  Midashi Go MB31
  Shinsei Kaisho CBSK1
  Ryumin Medium M-KL
  Ryumin Bold B-KL
  Ryumin Ultra U-KL
  Shin Gothic L
  Shin Gothic M
  Shin Gothic B
  Shin Gothic U
  Jun 34
  Jun 501
  Gothic MB101 Bold
  Gothic MB101 Heavy
  Gothic MB101 Ultra
  Ryumin Regular R-KL
  Ryumin Heavy H-KL
  Shin Gothic R

- CONFIGURATION 3: Simplified Chinese, Standard (1 faces)
  All of these fonts use the Adobe-GB1-4 Character Collection and the Trademarks are owned by Adobe

  Adobe Song Std-Light

- CONFIGURATION 4: Traditional Chinese, Standard (1 faces)
  All of these fonts use the Adobe-CNS1-4 Character Collection and the Trademarks are owned by Adobe

  Adobe MingStd-Light

- CONFIGURATION 5: Korean, (1 face)
  All of these fonts use the Adobe-Korea 1-2 Character Collection and the Trademarks are owned by Adobe

  Adobe Myungjo Std-Medium

About Creo

Creo is a world leader in solutions for the graphic arts industry. Core product lines include image capture systems; inkjet proofers; thermal imaging devices for films, plates, and proofs; professional color and copydot scanning systems; workflow management software; and proofing and printing consumables. Creo is also an original equipment manufacture supplier of on-press imaging technology, components for digital presses, and color servers for high-speed, print-on-demand digital printers. Creo trades under the symbols CREO on NASDAQ and CRE on the Toronto Stock Exchange. www.creo.com

© 2005 Creo Inc. The Creo product names mentioned in this document are trademarks or service marks of Creo Inc. and may be registered in certain jurisdictions. Other company and brand, product, and service names are for identification purposes only and may be trademarks or registered trademarks of their respective holders. Data is subject to change without notice.